



## **The Green Economy and Economic Development - Reduced and Sunk Costs to Greening and their Competitive Implications for Developing Countries**

**Andersen, Maj Munch**

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Green transformation and competitive advantage: Evidence from developing countries”

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## **The Green Economy and Economic Development - Reduced and Sunk Costs to Greening and their Competitive Implications for Developing Countries**

Maj Munch Andersen, Department of Management Engineering

Technical University of Denmark

mmua@dtu.dk

### **Abstract**

In recent years still more developing countries develop ‘green growth’ strategies. Yet there is much debate and uncertainty as to the competitive implications of such strategies for these countries and even more so than for developed economies. Typically it is argued that developed economies have early mover green advantages and are more innovation-driven than the typically more factor-driven developing countries and hence may easier harvest the competitive advantages of the transformation to a green economy. Applying an evolutionary economic perspective, this paper argues that a neglected and important element in this debate are the widespread sunk cost to global greening. Investigating the nature and loci of these sunk costs the paper argues that these are changing the conditions for eco-innovation in important ways that may benefit the developing countries. The green transformation of the economy has been undergoing for the last 60-70 years mainly in the developed economies and while considerable challenges still remain important learnings and changes have occurred. The changes are so substantial that we may refer to the green transformation as a green techno-economic paradigm (TEP) with pervasive and structural effects for the global economy, but distributed unevenly geographically. Due to the reduced and sunk costs of the green TEP late-comer countries may gain competitive advantages in two fundamental ways. A) The costs of green entry are lower- it is considerably easier to eco-innovate for companies today than 30-40 years ago; B) Competitive advantages may be gained by leapfrogging directly into a more mature green agenda, avoiding some of the sluggish learnings and severe lock-ins that developed economies have been going through while muddling through their green transformations. This requires, though, that the reduced and sunk costs of the green TEP are properly understood and that developing countries develop strategies and novel policies for harvesting these. The risk is that developing countries in their urgent needs to find green solutions instead continue imitating the (partly advanced, partly obsolete) green technologies, approaches and policies of the developed economies rather than harvesting the leapfrogging opportunities.